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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,279	04/24/2001	M. Kivanc Mihcak	MS1-792US	7789
22801	7590	03/01/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			KIM, JUNG W	
			ART UNIT	PAPER NUMBER
			2132	
DATE MAILED: 03/01/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/843,279	MIHCAK ET AL.	
	Examiner	Art Unit	
	Jung W Kim	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 25-27, 29-36, 66 and 68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 25-27, 29-32, 34-36, 66 and 68 is/are rejected.
- 7) ☒ Claim(s) 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 25-27, 29-36, 66 and 68 have been examined. Applicant in the amendment filed on January 7, 2004 amended claims 25, 29, 34, 66 and 68, and canceled claims 28 and 67. Applicant in an earlier amendment canceled claims 1-24, 37-65, 69 and 70.

#### ***Response to Amendment and Remarks***

2. The 112, second paragraph rejections of claims 25-27, 29-36, 66 and 68 are withdrawn as the amendments to the independent claims, specifically eliminating the limitation "approximately" from the claims, overcome the 112, second paragraph rejection. However, in light of these amendments, a new 112, 1<sup>st</sup> paragraph issue is raised for claims 25-27, 29-32, 34-36, 66 and 68, as outlined below.

3. Regarding applicant's remark that the amendment to claim 34 is statutory by establishing a product-by-process claim (see Remarks, pg. 8, 2<sup>nd</sup> full paragraph), a 101 issue still persists since the resulting modulated signal formed by the acts of claim 25 is nonfunctional descriptive material and does not exhibit any functional interrelationship with the way in which computing processes are performed. Further the fact that the signal is embodied on one or more computer-readable media does not establish a statutory process, machine, manufacture or composition of matter; the computer-readable media acts as nothing more than a carrier for nonfunctional descriptive

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material. The purely non-functional descriptive material cannot alone provide the practical application for the manufacture. See MPEP 2106 IV B 1(b).

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 25-27, 29-32, 34-36, 66 and 68 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for generating a marked signal by embedding the quantized statistics of the one or more segments into the digital signal via quantization index modulation (see Specification, pgs. 9-10, "Summary"; pgs. 19-21, "Methodological Implementation of the Exemplary Non-Local QIM Watermark Embedding"), does not reasonably provide enablement for generating a marked signal equivalent to a combination of the digital signal and the combination of the quantized statistics of the one or more segments. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The specification is not enabling because the limitation of generating a marked signal equivalent to a combination of the digital signal and the quantized statistics defines an invention that includes watermark techniques other than quantization index modulation, such as spread spectrum which is not enabled by the specification.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 27 recites the limitation "the signal". It is not clear whether the signal references the digital signal or the marked signal.

***Claim Rejections - 35 USC § 101***

9. The text of those sections of Title 35, U.S. Code 101 not included in this action can be found in a prior Office action.

10. Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 34 is drawn to a modulated signal embodied on one or more computer-readable media generated in accordance with the method recited in claim 25. However, the modulated signal is nonfunctional descriptive material and does not exhibit any functional interrelationship with the way in which computing processes are performed. Further the fact that the signal is embodied on one or more computer-readable media does not establish a statutory process, machine, manufacture or composition of matter; the computer-readable media acts as nothing more than a carrier for nonfunctional descriptive material. The purely non-functional

descriptive material cannot alone provide the practical application for the manufacture.  
See MPEP 2106 IV B 1(b).

***Allowable Subject Matter***

11. Claim 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. Claims 25-27, 29-32, 35, 36, 67 and 68 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1<sup>st</sup> and/or 2<sup>nd</sup> paragraphs, set forth in this office action and to include all of the limitations of the base claim and any intervening claims. Statement for the reasons of allowable subject matter was outlined in the office action dated November 8, 2004.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W Kim whose telephone number is (571) 272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jung W Kim  
Examiner  
Art Unit 2132

Jk  
February 25, 2005

  
GILBERTO BARRÓN JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100